

March 7, 2011

Mr. Herb Neumann, Professional Engineer III
Oklahoma Department of Environmental Quality
3105 East Skelly Drive, Suite C200
Tulsa, OK 74105

Mr. Phil Martin, P.E.
707 N. Robinson
P.O. Box 1677
Oklahoma City, OK 73101-1677

Mr. Eric Milligan, P.E.
707 N. Robinson
P.O. Box 1677
Oklahoma City, OK 73101-1677

RE: Norit Americas Inc., 1-Hour NO₂ and SO₂ Modeling Results

Dear Gentlemen:

Enclosed is the modeling report demonstrating compliance with the new 1-hour NO₂ and SO₂ National Ambient Quality Standards (NAAQS).

In the letters dated March 30 and July 19, 2010, the Oklahoma Department of Environmental Quality (ODEQ) requested additional modeling in support to the Major Air Quality Application to address new 1-hour NO₂ and SO₂ NAAQS and changes in PM_{2.5} NAAQS compliance demonstrations policy promulgated in 2010. PM_{2.5} was addressed in the August 23, 2010 preliminary modeling protocol and again in the March 4, 2011 submittal to DEQ.

Based on the results of the modeling, it has been determined that the following (or equivalent) changes to the facility sources are to be made in order to meet the new standards:

1. Consolidate the emissions from the Primary Carbonizer Boiler, Secondary Carbonizer Boiler, Activator Boiler and Main Activator and route them to a single consolidated stack located approximately 60 feet to the north of the existing main activator stack.

March 7, 2011

Mr. Herb Neumann, Professional Engineer III

Mr. Phil Martin, P.E.

Mr. Eric Milligan, P.E.

2. Reduce the overall allowable SO₂ emissions from the four emission sources listed above approximately 25%. The reduced combined SO₂ emission rate used in the modeling is 283.905 lb/hr and 1,243.5 tpy.

The modeling demonstrates that the proposed stack configuration and emission rate will ensure compliance for the Pryor Facility with the new NAAQS. However, NORIT wishes to reserve the right to revise the emission rates and stack configurations in the near future to achieve the goals of protecting NAAQS by means other than those represented in this report (e.g., reduce emission rates, additionally modify the stack parameters or move the stack to a different location). A demonstration of equivalency of the air impacts will be achieved through additional modeling.

Sage Environmental will forward the electronic modeling files and hard copies under separate cover. Please direct any technical questions to Igor Shnayder, Sage Environmental, at 972-996-0085.

Kind regards,



Dale E. Fentress

Process Engineer/ On-Site Environmental Contact

Enclosures

L030711.DOC

cc: Mr. Phillip Fielder, Engineering Manager, ODEQ